

ABSTRACT

A polymer electrolyte composition characterized by comprising: (1) a crosslinked material of a polyether binary copolymer which has a main chain comprising repeating units represented by the formula (i) and crosslinking units represented by the formula (ii) and which has a weight-average molecular weight of 10^4 to 10^7 , (2) an electrolyte solution comprising an aprotic organic solvent, (3) an additive, as an optical ingredient, which comprises an ether compound having an ethylene oxide unit, and (4) an electrolyte salt compound comprising a lithium salt compound. The composition is excellent in liquid retention and ionic conductivity, is usable in a wide temperature range, and has excellent electrochemical properties.